

### **REMARKS**

Applicant respectfully requests entry and consideration of the following remarks even though presented after a final rejection. Applicant submits that the remarks do not raise new issues or require a new search. Further, entry and consideration of the remarks may isolate issues for potential allowance or appeal. The remarks were not presented earlier in the prosecution due to a better understanding of the Examiner's position as reflected in the latest Office Action.

#### **Summary**

Claims 1-23 stand in this application. Claims 7 and 17 have been previously withdrawn. No new matter has been added. Favorable reconsideration and allowance of the standing claims are respectfully requested.

#### **Allowable Claims**

We would like to thank the Examiner for indicating the allowability of claims 4 and 14 if amended to include all of the limitations of the base claims and any intervening claims. Applicant respectfully submits, however, that these claims represent patentable subject matter as currently listed based on the amendments and/or remarks given for the independent claims as discussed in detail below. Applicant would like to respectfully reserve the right, however, to amend the allowable claims into independent form during further prosecution if warranted.

**Allowed Claims**

We would like to thank the Examiner for indicating the allowability of claims 22 and 23.

**Double Patenting**

Claims 22 and 23 stand rejected under the judicially created doctrine of obviousness-type double patenting as being substantial duplicates of claims 4 and 14 of the same application. Applicant respectfully disagrees. Applicant respectfully submits that at least the limitation “generated from a characteristic of said input signal,” as recited in independent claims 1 and 10, is not recited in independent claims 22 and 23. Therefore, Applicant respectfully submits that claims 22 and 23 are not substantial duplicates of claims 4 and 14 and removal of the double patenting rejection is respectfully requested.

**35 U.S.C. § 102**

At page 2, paragraph 3 of the Office Action claims 18-19 stand rejected under 35 U.S.C. § 102 as being anticipated by United States Patent Publication Number 2003/0001668 to Mruz (“Mruz”). Applicant respectfully traverses the rejection, and requests reconsideration and withdrawal of the anticipation rejection.

Applicant respectfully submits that to anticipate a claim under 35 U.S.C. § 102, the cited reference must teach every element of the claim. *See* MPEP § 2131, for example. Applicant submits that Mruz fails to teach each and every element recited in

claims 18-19 and thus they define over Mruz. For example, with respect to claim 18,

Mruz fails to teach, among other things, the following language:

determining a reference impedance for an input to a plurality of segments for one or more operational states of said plurality of segments; and for adaptively adjusting impedance of said input toward said reference impedance.

According the Office Action, this language is disclosed by Mruz at paragraphs [0020], [0021], [0027], [0030] and [0031]. Applicant respectfully disagrees.

Applicant respectfully submits that Mruz fails to teach, suggest or disclose the missing language. Mruz, arguably, teaches a power divider/combiner for dividing an RF signal into a number of output ports that utilizes impedance matching reeds that are only activated when varying numbers of output ports are activated. In contrast, the claimed subject matter teaches “determining a reference impedance for an input to a plurality of segments for one or more operational states of said plurality of segments; and for adaptively adjusting impedance of said input toward said reference impedance.”

Applicant respectfully submits that this is different than the above recited teaching of Mruz.

Applicant respectfully submits that Mruz fails to teach at least determining a reference impedance and adaptively adjusting the impedance toward the reference impedance as recited in claim 18. In contrast, Mruz at paragraph [0027], in relevant part, states:

...impedance matching reed 38 is activated when two output ports are connected, impedance matching reed 39 is activated when three ports are connected and impedance matching reed 37 is activated when four output ports are connected.

Applicant respectfully submits that mechanically activating impedance matching reeds in response to differing numbers of output ports being connected is clearly different than determining a reference impedance and adaptively adjusting the impedance toward the reference impedance.

Applicant respectfully submits that he has been unable to locate any teaching in Mruz directed to determining a reference impedance for an input to a plurality of segments for one or more operational states of said plurality of segments. Applicant respectfully submits that Mruz at paragraph [0021], arguably, teaches calculating an input impedance based on the load applied at the output ports. Applicant respectfully submits that this is different than the above recited language of claim 18. Moreover, Applicant respectfully submits that he has been unable to locate any teaching in Mruz directed to adaptively adjusting impedance of said input toward said reference impedance as recited in claim 18.

As recited above, Applicant respectfully submits that Mruz fails to teach the determination of a reference impedance. Furthermore, Applicant respectfully submits that the use of mechanical impedance matching reeds that are connected based on the configuration of the output ports, as arguably taught by Mruz, is clearly different than adaptively adjusting impedance of an input toward a reference impedance as recited in claim 18. Consequently, Mruz fails to disclose all the elements or features of the claimed subject matter. Accordingly, Applicant respectfully requests removal of the anticipation rejection with respect to claim 18. Furthermore, Applicant respectfully requests withdrawal of the anticipation rejection with respect to claim 19, which depends from

claim 18 and, therefore, contains additional features that further distinguish this claim from Mruz.

**35 U.S.C. § 103**

At page 3, paragraph 6 of the Office Action claims 20-21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Mruz. At page 4, paragraph 7 of the Office Action claims 1-3, 5-6, 8-13 and 15-16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Mruz in view of United States Patent Number (USPN) 6,349,216 to Alberth ("Alberth"). Applicant respectfully traverses the rejections, and requests reconsideration and withdrawal of the obviousness rejections.

The Office Action has failed to meet its burden of establishing a *prima facie* case of obviousness. According to MPEP § 2143, three basic criteria must be met to establish a *prima facie* case of obviousness. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP 706.02(j).

As recited above, to form a *prima facie* case of obviousness under 35 U.S.C § 103(a) the cited references, when combined, must teach or suggest every element of the claim. See MPEP § 2143.03, for example. Applicant respectfully submits that the Office

Action has not established a *prima facie* case of obviousness because the cited references, taken alone or in combination, fail to teach or suggest every element recited in claims 1-3, 5-6, 8-13, 15-16 and 20-21. Therefore claims 1-3, 5-6, 8-13, 15-16 and 20-21 define over the cited references whether taken alone or in combination.

Applicant respectfully submits that independent claims 1, 8 and 10 recite features similar to those recited in independent claim 18. As recited above, Applicant respectfully submits that Mruz fails to teach, suggest or disclose each and every element recited in independent claim 18. Furthermore, Applicant respectfully submits that Alberth also fails to teach, suggest or disclose the missing language. Therefore, Applicant respectfully submits that claims 1, 8 and 10 are not obvious and are patentable over the cited references for reasons analogous to those presented above with respect to claim 18. Accordingly, Applicant respectfully requests removal of the obviousness rejection with respect to claims 1, 8 and 10. Furthermore, Applicant respectfully requests withdrawal of the obviousness rejection with respect to claims 2-3, 5-6, 9, 11-13, 15-16 and 20-21 that depend from claims 1, 8, 10 and 18 respectively, and therefore contain additional features that further distinguish these claims from the cited references.

For at least the reasons given above, claims 1-3, 5-6, 8-13, 15-16 and 20-21 are non-obvious and represent patentable subject matter in view of the cited references, whether taken alone or in combination. Accordingly, removal of the obviousness rejection with respect to claims 1-3, 5-6, 8-13, 15-16 and 20-21 is respectfully requested. Further, Applicant submits that the above-recited novel features provide new and unexpected results not recognized by the cited references. Accordingly, Applicant

submits that the claims are not anticipated nor rendered obvious in view of the cited references.

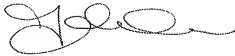
Applicant does not otherwise concede, however, the correctness of the Office Action's rejection with respect to any of the dependent claims discussed above. Accordingly, Applicant hereby reserves the right to make additional arguments as may be necessary to further distinguish the dependent claims from the cited references, taken alone or in combination, based on additional features contained in the dependent claims that were not discussed above. A detailed discussion of these differences is believed to be unnecessary at this time in view of the basic differences in the independent claims pointed out above.

It is believed that claims 1-23 are in allowable form. Accordingly, a timely Notice of Allowance to this effect is earnestly solicited.

The Examiner is respectfully requested to contact the undersigned by telephone if such contact would further the examination of the present patent application.

Respectfully submitted,

KACVINSKY LLC



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John F. Kacvinsky, Reg. No. 40,040  
Under 37 CFR 1.34(a)

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